Appl. No.

10/511,796

Filed

October 19, 2004

AMENDMENTS TO THE CLAIMS

- 1. (Cancelled)
- 2. (Currently amended) A <u>recombinant DNA</u> encoding a protein <u>defined in the following</u>
 (A) or (B):
- (A) a protein-which has at least an amino acid sequence comprising amino acids 23 to 425 of SEQ ID NO: 16;
- (B) a protein which has a substitution, deletion, insertion or addition of 1 to 20 amino acid residues in the protein which has at least the amino acid sequence comprising amino acids 23 to 425 of SEQ ID NO: 16.
- 3. (Currently amended) The <u>recombinant DNA</u> according to claim 2, wherein the DNA is defined in the following (a) or (b):
- (a) a DNA comprising comprises a nucleotide sequence consisting of nucleotides 187 to 1398 of SEQ ID NO: 15;
- (b) a DNA which is hybridizable with the nucleotide sequence consisting of nucleotides 187 to 1398 of SEQ ID NO: 15 under stringent conditions.
- 4. (Previously presented) The <u>recombinant DNA</u> according to claim 3, further comprising a nucleotide sequence consisting of nucleotides 121 to 187 of SEQ ID NO: 15.
- 5. (Previously presented) A recombinant vector comprising the DNA according to claim 2.
- 6. (Currently amended) A transformant An isolated host cell transformed with the DNA according to claim 2.
- 7. (Currently amended) A method of producing a glucose dehydrogenase β subunit, comprising culturing the transformant cell according to claim 6 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 8-31. (Cancelled)
 - 32. (New) A recombinant vector comprising the DNA according to claim 3.
 - 33. (New) A recombinant vector comprising the DNA according to claim 4.

 Appl. No.
 :
 10/511,796

 Filed
 :
 October 19, 2004

- 34. (New) An isolated host cell transformed with the DNA according to claim 3.
- 35. (New) An isolated host cell transformed with the DNA according to claim 4.
- 36. (New) An isolated host cell transformed with the recombinant vector according to claim 5.
- 37. (New) An isolated host cell transformed with the recombinant vector according to claim 32.
- 38. (New) An isolated host cell transformed with the recombinant vector according to claim 33.
- 39. (New) A method of producing a glucose dehydrogenase β subunit comprising culturing the cell according to claim 34 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 40. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 35 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 41. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 36 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 42. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 37 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 43. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 38 to produce a glucose dehydrogenase β subunit as an expression produce of the DNA, and collecting the produced β subunit.
- 44. (New) A recombinant DNA which is hybridizable with a nucleotide sequence consisting of nucleotides 187 to 1398 of SEQ ID NO: 15 under stringent conditions comprising 1xSSC, 0.1% SDS, and 60 °C, which has 90% or more homology to SEQ ID NO: 15, and which encodes a protein having a substitution, deletion, insertion or addition of 1 to 5 amino acid residues in the protein which has at least the amino acid sequence comprising amino acids 23 to 425 of SEQ ID NO: 16.

Appl. No.

: 10/511,796

Filed

October 19, 2004

45. (New) The DNA according to claim 44, further comprising a nucleotide sequence consisting of nucleotides 121 to 187 of SEQ ID NO: 15.

- 46. (New) A recombinant vector comprising the DNA according to claim 44.
- 47. (New) A recombinant vector comprising the DNA according to claim 45.
- 48. (New) An isolated host cell transformed with the DNA according to claim 44.
- 49. (New) An isolated host cell transformed with the DNA according to claim 45.
- 50. (New) An isolated host cell transformed with the recombinant vector according to claim 46.
- 51. (New) An isolated host cell transformed with the recombinant vector according to claim 47.
- 52. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 48 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 53. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 49 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 54. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 50 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.
- 55. (New) A method of producing a glucose dehydrogenase β subunit, comprising culturing the cell according to claim 51 to produce a glucose dehydrogenase β subunit as an expression product of the DNA, and collecting the produced β subunit.